### **Appendix C**

Vapor Vacuum Extraction with Treatment Technician Training Plan and Technician Qualification Checklist

# VVET Thermal/Catalytic Oxidizer Technician Training Plan

| Qualified VVET Technician | Date |
|---------------------------|------|
| Training Supervisor       | Date |
| ved                       |      |
|                           |      |

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#### I. Introduction

The purpose of this Training Plan is to ensure that technicians involved in start-up operation and shut-down of the Vapor Vacuum Extraction Treatment (VVET) Unit(s) receive the training required to support the safe performance of all activities. These activities include the walk-downs, start-ups, operational checks, and responding to system abnormal conditions.

### II. Determination of Training Requirements

#### A. General

A table-top job analysis and design meeting was conducted in accordance with MCP-36, "Job Analysis," to identify training requirements. The results of this meeting, including participants are documented on the VVET TASK LIST.

During the meeting the tasks associated with the VVET units were identified and rated as Non-Formal Training, Train, Over-Train, or Pre-Train Tasks as defined in MCP-36. The required training is identified in this plan. The "Train" and "Over-Train" tasks identified will be used to establish performance items for required On-the-Job Training (OJT) and continuing training activities.

### B. Assumptions/Prequisites

- Technician candidates will be required to posses basic mechanical fundamental knowledge.
- Technician candidates will be required to have received a High School diploma or General Education Development (GED) equivalent.
- Technician candidates will be required to posses basic blue print, schematics, and diagram reading skills.
- 4. In addition to RWMC Facility-Specific Training requirements, technician candidates will be required to receive and maintain the following training courses or equivalent:
  - a. Requirements of Section 4, HASP
  - b. Lockout/Tagout for Authorized Employees (Course # 000TRN14)
  - c. Lockout/Tagout Practical (Course # 000TRN108)

When equivalent training is used, list the TRAIN Number and name of the course or identify the qualifying activity.

4. Technician candidates are trained and qualified to perform the tasks associated with their specialty or work under direct supervision of personnel qualified to

perform the activity or tasks and are trained and qualified in accordance with Department of Energy requirements.

NOTE:

This plan is based on the tasks from the analysis discussed above and these assumptions. Should new tasks be identified or the assumptions change, this plan will be revised accordingly.

### III. Training Methods

### A. Read and Sign

The process of reading documents or procedures and signing an attached required reading list. The required reading list is maintained with that revision of the document by the Training Coordinator.

### B. Briefing

A process where the Field Team Leader (FTL), Assistant FTL, or Chief Engineer (CE) discusses a document with those in attendance, normally during the daily POD meeting. The collective group then discusses the document to gain a full understanding of the content. This process is primarily used for changes or revisions to a document that had been previously trained on. This training is documented in the Plan of the Day (POD) attendance roster and the topic is listed as one of the items in the POD.

### C. Classroom training

The process whereby a document is discussed by an instructor using a document content outline and learning objectives. The goal of this training is to review with these individuals the current requirements and best practices regarding procedure use and compliance and review the steps of the procedures that they are required to perform prior to the actual performance. A written or oral quiz will be administered at the end of the classroom training. The purpose of the quiz is to determine the effectiveness of the training. This training will be documented on an attendance roster that identifies the instructor and each attendee.

### D. On-the-Job Training

OJT will require the individual to simulate, perform, and/or discuss all steps of the procedures that they are required to perform. Prior to completion, the trainee should be allowed to practice tasks under the direct supervisor. When the trainee is proficient, completion of OJT will be documented on the qualification card. The goal of this training is to ensure these individuals can demonstrate the required knowledge and skills to actually perform their tasks.

### E. Walk Through

A walk through is the process of simulating the action to be performed, without physically taking the action. The completion of this training is documented in the FTL logbook with a description of the activity walked through and a listing of those individuals that participated in the training.

### IV. Training Requirements/Activities

#### A. Technician Candidates

#### 1. Classroom training

Initial training activities are those listed as pre-requisite training in the area of Hazard Waste Operations and Lockout/Tagout training

### 2. **O.IT**

OJT is required for Technician Candidates on tasks they are required to perform and are identified on the Task-to-Training matrix.

### 3. Training Evaluation

A comprehensive written exam will be administered prior to the final OJT evaluation. Technician Candidates will be required to receive a grade of 80 percent or better and will be remediated to 100 percent on those items missed. The purpose of the exam is to determine the effectiveness of the training, determine readiness to advance on to the OJT, and is documented on the qualification card.

The qualification card is used to document that the individual has completed required OJT and has successfully demonstrated specific knowledge and skill requirements.

### RWMC VVET TECHNICIAN TRAINING PLAN Appendix A - Table-Top Task Analysis

Performed by:

J. Douglas Hall

Bruce Culp

Date:

08/02/99

Participants:

Clayton Antonson Richard Jacobson

Tasks associated with VVET operation:

- 1. Start-up Extractor
- Routine Surveillance
- Operational Checks
- Shut-down Extractor

#### Process:

- 1. Identify tasks for the qualification standard and incorporate into an On-the-Job Training (OJT) Qualification Card.
- Select tasks for training.
- Validate analysis results.
- 4. From the tasks identified, develop Knowledge, Skill and Ability components for tasks to be factored qualification standard and entered on the the OJT Qualification Card. Establish prerequisites and entry-level requirements.

### Tasks associated with the VVET process are:

1. Start-up Extractor

Pre-operation set-up

Pre-heat the extractor

Place Extractor in "Run" mode

2. Routine Surveillance

Log-keeping

Visual checks

Alarm responses

Operational Sampling

3. Operational Checks

Lubrication

Air filters

Air conditioners

Air dryer

4. Shut-down Extractor

Normal

Intermediate

Emergency

### RWMC VVET TECHNICIAN TRAINING PLAN Appendix A - Table-Top Task Analysis

### Prerequisites for VVET Technician are:

High school graduate or equivalent.

Knowledge of mechanical fundamentals.

Two-month field experience on VVET under direction of a qualified technician.

Perform six VVET unit start-up and shut-down cycles.

### Testing:

Performance testing by completion of OJT Qualification Card.

Upon completion of Qualification Card, pass a written examination with a score of 80% or better.

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### RWMC VVET TECHNICIAN TRAINING PLAN Appendix B - Task-to-Training Matrix

| Task# | Task Description/Duty Level             | Train<br>Level | Setting     | Frequency             | Lesson Plan<br>Number | Primary<br>Procedure | Qualification<br>Card Number | JPM<br>Number                         |
|-------|---|----------------|-------------|-----------------------|-----------------------|----------------------|------------------------------|---------------------------------------|
|       |   | Duty Ar        | ea: 1. Star | t-up Extractor        |                       |                      |                              | · · · · · · · · · · · · · · · · · · · |
| I.A   | Pre-Operation Set-up                    | Т              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 1.B   | Pre-heat Extractor                      | T              | ОЛТ         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 1.C   | Place Extractor in the "Run" mode       | T              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
|       | *************************************** | Duty Area      | ı: 2. Routi | ne Surveillance       |                       |                      |                              |                                       |
| 2.A   | Tour facility and make visual checks    | T              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 2.B   | Log-keeping                             | T              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 2.C   | Alarm Responses                         | ОТ             | OJT         | Initial<br>Continuing | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 2.D   | Operational Sampling                    | T              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
|       |   | Duty Are       | a: 3. Oper  | ational Checks        |                       |                      |                              |                                       |
| 3.A   | Lubrication                             | T              | ОЛТ         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 3.B   | Air filters                             | T              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 3.C   | Air conditioners                        | Т              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 3.D   | Air dryer                               | Т              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
|       |   | Duty Area      | : 4. Shut-c | iown Extractor        |                       |                      |                              |                                       |
| 4.A   | Normal shut-down                        | Т              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 4.B   | Intermediate shut-down                  | Т              | OJT         | Initial               | N/A                   | N/A                  | 30020305                     | N/A                                   |
| 4.C   | Emergency shut-down                     | ОТ             | OJT         | Initial<br>Continuing | N/A                   | N/A                  | 30020305                     | N/A                                   |

# VVET Thermal Oxidizer Technician Qualification Checklist

| RWMC TRAINING QUAL                                       | IFICATION CARD                            |
|--|---|
| Name: S#   |   |
| RWMC VVET TECHNIO  | CIAN TRAINING                             |
|  |   |
| RWMC TRAINING  | PROGRAM                                   |
|  | ·<br>~                                    |
| VAPOR VACUUM EXTRACTI<br>TECHNICI<br>INITIAL QUALIFICATI | AN  |
| Checklist Number:  | 30020305                                  |
| Rav. 01<br>CJ.F. 03-                                     |   |
| Instructional Developer: J. D. Hall, D. W. I             |   |
| IT/Program Lead Review: SM                               | E/Technical Review:                       |
| Training Manager/Supervisor Review: Lin                  | Date: 3/101  Manager/Supervisor Approval: |
|  | in Kernezo Date: 2/28/01                  |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

| MODIFICATION RECORD |                   |                          |                        |  |
|---------------------|-------------------|--------------------------|------------------------|--|
| Submitte            | d by:             | Date:                    | ***                    |  |
| Change<br>Number    | Affected<br>Pages | Description<br>of Change | Management<br>Approval |  |
|                     |                   |                          |                        |  |
|                     |                   |                          |                        |  |
|                     |                   |                          |                        |  |
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|                     |                   |                          |                        |  |
|                     |                   |                          |                        |  |
|                     |                   |                          |                        |  |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

### Signature Roster

If signing or initialing items within this qualification guide/card enter your name on the roster below. Please print your name legibly in the first column, sign in the second, and place your initials in the last column. Copy this sheet if necessary. Thank you.

| Name (Print) | Signature | Initials |
|--------------|-----------|----------|
|              |           |          |
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|              |           |          |

## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

### I. INTRODUCTION

- A. This checklist is to be completed by:
  - 1. Each RWMC VVET Technician assigned to work on the VVET System.
- B. The purpose of this checklist is to identify training elements for which technicians must become qualified to work independently on VVET related equipment and to provide assurance that only qualified personnel are assigned to work independently on VVET related equipment.
- C. Satisfactory knowledge of the items in this checklist is determined either through oral checkouts or completion of practical factors.
  - Practical factors are completed under the direct supervision of a qualified individual, unless specifically stated otherwise. Practical factors provide both hands-on experience and evaluation for the qualifying individual.
     Practical factors are required when the task is followed by a P/S.
    - a. "P" requires the individual to actually perform the operation.

      Prior to performance, a thorough discussion of the operation must be completed between the individual and the reviewer. The effects the evaluation will have on the associated systems and abnormal situations that may arise will be discussed. Every effort shall be made to perform practical factors. If however, plant status, safety, or equipment availability precludes timely performance of the item a simulation may be performed.
    - b. "S" requires the individual to simulate the performance during a walk-through of the evolution in the same detail as a "P" except the actual evolution is not performed. The same evolution discussion required for a "P" will be conducted. All items shall actually be performed, if plant conditions permit, at the discretion of the reviewing individual. When the task if followed by a P/S, the applicable letter must be circled.
    - c. An oral review and/or walk-through at the discretion of the reviewing individual may check out items not marked with a P/S.
- D. Each sign-off represents that individual's personal verification to WAG 7 and RWMC Management that the qualifying individual has demonstrated a satisfactory level of knowledge/performance. Once an individual element is signed off as complete, the operator is qualified to work independently on the task(s) signed off on the checklist. Each individual signature will be in permanent

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### RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

black ink and consist of a legal signature and full date. As a minimum, a legal signature consists of one initial and full last name. The date will indicate month, day, and year.

- E. All applicable items are to be completed. Items that are not applicable must be marked N/A. All items marked N/A require a justification to delete the item and must be approved by the WAG 7 Field Operations Supervisor. The WAG 7 Field Operations Supervisor documents the justification in the space provided at the end of the checklist and provides a legal signature and date
- F. Upon completion of this checklist it shall be routed to the RWMC Management for final review and approval. The checklist will then be routed to RWMC Training for inclusion in the individual's training record.
- G. By my signature below, I acknowledge that I have reviewed and understand the preceding checklist information. Additionally, I have verified that all pages of this checklist are present.

| Qualifying Individuals Signature      | Date |
|---------------------------------------|------|
| Quality fills Intal viduals Signature |      |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

### II. SAFETY

- A. Demonstrate, by oral checkout, a satisfactory understanding of the following Safety items listed below. A satisfactory understanding is the ability to describe:
  - Your responsibility concerning each safety item
  - The purpose of each
  - How to apply the safety program/practice

| B. | Checkout shall be by a qualified VVET Technician or a designated Foreman/Supervisor.   |  |             |      |  |  |
|----|--|--|-------------|------|--|--|
|    | 1.   | Electrical Safety<br>Practices (MCP 2731)                | Signature   | Date |  |  |
| C. | Attend the following training sessions. This training is provided by the Site Training Directorate or an outside vendor and must be scheduled as appropriate. Satisfactory completion of training is indicated by the instructor's or training records administrator's signature in the appropriate sign-off block.  1. Lockout/Tagout for |  |             |      |  |  |
|    |  | Authorized Employees (Limited) (000TRN663) or equivalent |             |      |  |  |
|    |  | Signature  |             | Date |  |  |
|    | 2.   | Lockout/Tagout Practical (000TRN108) or equivalent       |             |      |  |  |
| •  |  | Signature  |             | Date |  |  |
|    | 3.   | HASP Training Requirements                               | •           |      |  |  |
|    |  | Signature  | <del></del> | Date |  |  |

- 4. Conduct of Operations Training Requirements
  - a. Con Ops Chapter 1 Ops Organization (00TRN491) or equivalent

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

| Signature  | Date                            |
|--|---------------------------------|
| b. Con Ops Chapter 2 Shift Routines (007             | TRN492) or equivalent           |
| Signature  | Date                            |
| c. Con Ops Chapter 3 Control Area Activ              | vities (00TRN493) or equivalent |
| Signature  | Date                            |
| d. Con Ops Chapter 4 Ops Communication               | on (00TRN494) or equivalent     |
| Signature  | Date                            |
| e. Con Ops Chapter 5 Control On-Shift T equivalent   | raining (00TRN495) or           |
| Signature  | Date                            |
| f. Con Ops Chapter 6 & 7 Event Investig equivalent   | ations (00TRN496) or            |
| Signature  | Date                            |
| g. Con Ops Chapter 8 Control of Equipm               | ent (00TRN497) or equivalent    |
| Signature  | Date                            |
| h. Con Ops Chapter 10 Independent Veri<br>equivalent | fication (00TRN499) or          |
| Signature  | Date                            |
| i. Con Ops Chapter 11 Logkeeping (00T)               | RN500) or equivalent            |
| Signature  | Date                            |
| j. Con Ops Chapter 12 Operations Turno               | ver (00TRN575) or equivalent    |
| Signature  | Date                            |
| k. Con Ops Chapter 13 Operations Aspec               | ets (00TRN576) or equivalent    |
| Signature  | Date                            |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

| ì.  | Con Ops Chapter 14 Required Reading  | (00TRN577) or equivalent        |
|-----|--------------------------------------|---------------------------------|
| Sig | gnature                              | Date                            |
| m.  | Con Ops Chapter 15 Timely Orders (00 | TRN578) or equivalent           |
| Sig | gnature                              | Date                            |
| n.  | Con Ops Chapter 16 Operations Proced | ures (00TRN579) or equivalent   |
| Sig | gnature                              | Date                            |
| 0.  | Con Ops Chapter 17 Operator Aids (00 | TRN580) or equivalent           |
| Sig | gnature                              | Date                            |
|     | Con Ops Chapter 18 Equipment Labelin | ng (00TRN581) or equivalent     |
| p.  | con ope chapter to Equipment Endem   | ig (oblication) of order and in |

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### RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

### III. RWMC VVET Unit Walk Through Training

- A. Work with a qualified VVET Technician. A satisfactory knowledge should include the individual's ability to:
  - State the purpose of the system.
  - Identify the major components of the system.
  - Describe the function of each major component.
  - Describe how components affect overall system operations.
  - Describe the steps taken to ensure each component is functioning properly.
  - Identify any special precautions, limitations or technical specifications to be considered prior to starting up, operating, and shutdown on the system.

Note: System Design Document, Technical and Functional Requirements documents, Piping and Instrument Diagrams, and electrical diagrams shall be used to study for and complete this section.

B. Satisfactory completion of training is indicated by the instructor's or training records administrator's signature in the appropriate sign-off block.

| I. RWMC VVET | Unit Walk | Inrough | Training |
|--------------|-----------|---------|----------|
|--------------|-----------|---------|----------|

DITO 40 111 DOD 11 1 11 01

|           | •        |  |
|-----------|----------|--|
| Signature | <br>Date |  |
|           |          |  |

### IV. ADMINISTRATIVE KNOWLEDGE

- A. Demonstrate, by oral checkout, a satisfactory knowledge of the following procedures (TPR), preventative maintenance work orders, and round sheets.
  - State the purpose of the procedure, work order, or round sheet.
  - Describe the procedures applicability to job responsibilities.
  - Describe administrative controls (Precautions and Limitations, Prerequisites) associated with each procedure.
  - Identify document location and describe how documents are checked out and checked in.
  - Identify when a Radiological Control Technician (RCT) should be contacted, how the RCT should be contacted, where the RCT foreman resides, and where the radiological monitors are located.
- B. Checkout shall be by a qualified VVET Technician or a designated Foreman/Supervisor.

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

|    |      | 1.    | TPR- 1628 VVET UNIT  | START-UP, OPERA  | TIONS, ANI     | SHUTDOWN      |
|----|------|-------|--|--|----------------|---------------|
|    |      |       | Signature  |  | Date           | -             |
|    |      | 2.    | TPR-1631, VVET Unit O  | perational Sampling  |                |               |
|    |      |       | Signature  |  | Date           | -             |
|    |      | 3.    | Annual, semi-annual, and   | monthly preventativ  | e maintenanc   | e work orders |
|    |      |       | Signature  |  | Date           | -             |
|    |      | 4.    | VVET round sheets (RS0   | 41) for component as   | nd operational | checks        |
|    |      |       | Signature  |  | Date           | -             |
|    |      | 5.    | VVET Unit logbooks   |  |                |               |
|    | •    |       | Signature  | a company that the same of | Date           | -             |
| v. | PRAC | CTIC  | AL FACTORS   |  |                |               |
|    | A.   | revie | nonstrate competency in each and/or walk-through at the k out the following items. |  |                |               |
|    |      | 1.    | Perform Start-Up of a VV   | ET system  |                |               |
|    |      |       | Ś  | ignature   |                | Date          |
|    |      | 2.    | Perform Routine Operation  | onal Checks on a VV  | ET system      |               |
|    |      |       | S  | ignature   |                | Date          |
|    |      | 3.    | Perform Shut-Down of a   | VVET system  |                |               |
|    |      |       | S  | ignature   |                | Date          |
|    |      | 4.    | Perform Operational Sam  | pling  |                |               |
|    |      |       | S  | ignature   |                | Date          |
|    |      |       |  |  |                |               |

| ecki |  |  |  |
|------|--|--|--|
|      |  |  |  |
|      |  |  |  |

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## RWMC Vapor Vacuum Extraction Treatment

| Technician INITIAL QUALIFICATION CHECKLIST  |    |                                |                 |  |  |     |
|---|----|--------------------------------|-----------------|--|--|-----|
| B. Items in this section are OJT. They require the individual to demonstrate ability to satisfactorily perform or simulate the following practical factor the instruction of a qualified VVET Technician, or a qualified job supervusing the applicable procedures, and approved work packages. |    |                                |                 |  |  |     |
|   | 1. | Perform at lea<br>Unit Start-U |                 | e at least 5 unassis                   | ted and without error VV                       | ÆT/ |
|   |    | 1. S                           | ignature        |  | P or S Date                                    |     |
|   |    | 2. S                           | ignature        |  | P or S Date                                    |     |
|   |    | 3. S                           | ignature        |  | P or S Date                                    |     |
|   |    | 4. S                           | ignature        | ······································ | P or S Date                                    |     |
|   |    | 5. S                           | ignature        |  | P or S Date                                    |     |
|   |    | 6. S                           | ignature        |  | P or S Date                                    |     |
|   | 2. |                                | eets and logboo |  | ET unit by completing t<br>of 8 weeks or until | he  |
|   |    | Signa                          | ature           | Dat                                    | te   |     |
|   |    |                                |                 |  |  |     |
|   |    |                                |                 |  |  |     |
|   |    |                                |                 |  |  |     |
|   |    |                                |                 |  |  |     |
|   | 3. | Perform a m                    | inimum of 6 Op  | perating Sampling of                   | evolutions                                     |     |
|   |    | 1. S                           | ignature        |  | Date   |     |
|   |    | 2 S                            | ignature        |  | Date   |     |

3. Signature \_\_\_\_\_\_Date \_\_\_\_

4. Signature \_\_\_\_\_\_ Date \_\_\_\_\_

| Checklist # 30020305 |                                   | Page 12 of 15 |
|----------------------|-----------------------------------|---------------|
| RWMO                 | Vapor Vacuum Extraction Treatment | •             |
|                      | Technician                        |               |
| INITI                | L QUALIFICATION CHECKLIST         |               |
|                      |                                   |               |

|    | 5. | Signature |   | Date |
|----|----|-----------|---|------|
|    | 6. | Signature |   | Date |
| 4. |    |           | VET Unit Shut Downs to al shut down of the system |      |
|    | 1. | Signature |   | Date |
|    | 2. | Signature |   | Date |
| •  | 3. | Signature |   | Date |
|    | 4. | Signature |   | Date |
|    | 5. | Signature |   | Date |
|    | 6. | Signature |   | Date |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

### VI. EMERGENCY/ABNORMAL KNOWLEDGE

- A. Demonstrate a satisfactory knowledge of the emergency/abnormal situations listed below during an oral checkout or walkthrough. A satisfactory knowledge should include the following, as appropriate.
  - Describe reasons for action(s) taken and the effect on the VVET operation. Include the consequences of failure to perform the procedure or mitigate the abnormal or emergency situation.
  - State the immediate actions.
  - Describe notification requirements for each situation.

| 1. | Simulate the response(s) to a loss of power to a V | VET Unit that is operating    |
|----|--|-------------------------------|
| •  | Signature  | Date                          |
| 2. | Simulate the response(s) to a loss of propane to a | VVET Unit that is operating   |
|    | Signature  | Date                          |
| 3. | Simulate the response(s) to a VVET Unit that will  | not start up                  |
|    | Signature  | Date                          |
|    |  | and a X/X/CVC XIII is because |
| 4. | Simulate the response(s) to a propane explosion/fi | re at a VVEI Unit location    |
|    | Signature  | Date                          |

### VII. JUSTIFICATION FOR DELETED OR N/A ITEMS

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

This section is provided to document the reason for each N/A. Each N/A will require a signature and date from the WAG 7 Field Operations Supervisor. When completing this portion indicate the section or subsection that is N/A along with the reason for the N/A.

| <del></del> |           |        |
|-------------|-----------|--------|
|             | Signature |        |
|             |           |        |
|             | Signature |        |
|             |           |        |
|             | Signature |        |
|             |           |        |
|             | Signature | _ Date |
|             |           |        |
|             | Signature | Date   |

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## RWMC Vapor Vacuum Extraction Treatment Technician INITIAL QUALIFICATION CHECKLIST

| VIII. EVALUATION  |   |  |
|---|---|--|
| examination, with a   | ete the RWMC VVET Unit Init score of 80% or better, upon control the qualification approval. The first of the exam. |  |
|   | Signature   | Date   |
| IX. QUALIFICATION AP  | PROVAL  |  |
| indicating it has been  | completed, or deemed N/A wi   | ach item has been either signed, th my approval. The completion and work independently on the RWMC |
|   | Signature   | Date   |
|   | WAG 7 Field   | Operations Supervisor  |
|   | Signature   | Date   |
|   | RWMC Opera  | tions Supervisor   |
| X. CHECKLIST REVIEW   | <i>i</i>  |  |
| A review of the check signatures are present training record. | clist has been completed and it and the checklist is acceptable   | has been determined that all required for inclusion in the individual's                            |
|   | Signature   | Date   |

| Signature             | •  | Date |  |
|-----------------------|----|------|--|
| Training Representati | ve |      |  |

C-30

# VVET Catalytic Oxidizer Technician Qualification Checklist

| RWMC TRAINING QUALIFICATION CARD |   |  |  |
|----------------------------------|---|--|--|
| Name:                            | S#  |  |  |
|                                  | RWMC VVET UNIT D TECHNICIAN TRAINING  |  |  |
|                                  | RWMC TRAINING PROGRAM   |  |  |
|                                  | VAPOR VACUUM EXTRACTION AND TREATMENT UNIT D TECHNICIAN INITIAL QUALIFICATION CHECKLIST   |  |  |
|                                  | Checklist Number: QL 323304   |  |  |
| IT/Program                       | Lead Review:  SME/Technical Review:  Date: 4/25/0/  |  |  |
| Training Ma                      | Anager/Supervisor Review:  Line Manager/Supervisor Approval:  Line Manager/Supervisor Approval:  Date: 4/25/01 Oxia Hawley  Date: 4/25/01 |  |  |

| Checklist # QL323304                     |  | Page 2 of 13 |
|--|--|--------------|
|  | RWMC Vapor Vacuum Extraction Treatment | -            |
| 1  | Unit D Technician                      |              |
| 1. · · · · · · · · · · · · · · · · · · · | INITIAL QUALIFICATION CHECKLIST        |              |
| ·  |  |              |

| MODIFICATION RECORD |                     |                          |                        |  |  |  |  |
|---------------------|---------------------|--------------------------|------------------------|--|--|--|--|
| Submitted           | Submitted by: Date: |                          |                        |  |  |  |  |
| Change<br>Number    | Affected<br>Pages   | Description<br>of Change | Management<br>Approval |  |  |  |  |
|                     |                     |                          |                        |  |  |  |  |
|                     |                     |                          |                        |  |  |  |  |
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|                     |                     |                          |                        |  |  |  |  |

| heckl | ist # QL323:     | 304                |       |              |              | •           |
|-------|------------------|--------------------|-------|--------------|--------------|-------------|
|       | . •              |                    | RWMC  | Vapor Vacu   | um Extractio | n Treatment |
|       |                  |                    |       | Unit D       | Technician   |             |
|       | are produced     |                    | INITL | AL QUALIF    | ICATION CH   | ECKLIST     |
|       | and the state of | La Service Service |       | - , PT 52 to |              |             |

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### Signature Roster

If signing or initialing items within this qualification guide/card enter your name on the roster below. Please print your name legibly in the first column, sign in the second, and place your initials in the last column. Copy this sheet if necessary. Thank you.

| Name (Print)                            | Signature                             | Initials |
|---|---------------------------------------|----------|
|   |                                       |          |
|   |                                       |          |
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|   |                                       |          |

### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

### I. INTRODUCTION

- A. This checklist is to be completed by:
  - 1. Each RWMC VVET Technician assigned to work on the VVET Unit D.
- B. The purpose of this checklist is to identify training elements for which technicians must become qualified to work independently on VVET Unit D related equipment and to provide assurance that only qualified personnel are assigned to work independently on VVET Unit D related equipment.
- C. Satisfactory knowledge of the items in this checklist is determined either through oral checkouts or completion of practical factors.
  - 1. Practical factors are completed under the direct supervision of a qualified individual, unless specifically stated otherwise. Practical factors provide both hands-on experience and evaluation for the qualifying individual. Practical factors are required when the task is followed by a P/S.
    - a. "P" requires the individual to actually perform the operation.

      Prior to performance, a thorough discussion of the operation must be completed between the individual and the reviewer. The effects the evaluation will have on the associated systems and abnormal situations that may arise will be discussed. Every effort shall be made to perform practical factors. If however, plant status, safety, or equipment availability precludes timely performance of the item a simulation may be performed.
    - b. "S" requires the individual to simulate the performance during a walk-through of the evolution in the same detail as a "P" except the actual evolution is not performed. The same evolution discussion required for a "P" will be conducted. All items shall actually be performed, if plant conditions permit, at the discretion of the reviewing individual. When the task if followed by a P/S, the applicable letter must be circled.
    - An oral review and/or walk-through at the discretion of the reviewing individual may check out items not marked with a P/S.
- D. Each sign-off represents that individual's personal verification to WAG 7 and RWMC Management that the qualifying individual has demonstrated a satisfactory level of knowledge/performance. Once an individual element is

Checklist # QL323304

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

signed off as complete, the operator is qualified to work independently on the task(s) signed off on the checklist. Each individual signature will be in permanent black ink and consist of a legal signature and full date. As a minimum, a legal signature consists of one initial and full last name. The date will indicate month, day, and year.

- E. All applicable items are to be completed. Items that are not applicable must be marked N/A. All items marked N/A require a justification to delete the item and must be approved by the WAG 7 Field Operations Supervisor or OU 7-08 Project Manager. The WAG 7 Field Operations Supervisor or OU 7-08 Project Manager documents the justification in the space provided at the end of the checklist and provides a legal signature and date
- F. Upon completion of this checklist it shall be routed to the RWMC Management for final review and approval. The checklist will then be routed to RWMC Training for inclusion in the individual's training record.
- G. By my signature below, I acknowledge that I have reviewed and understand the preceding checklist information. Additionally, I have verified that all pages of this checklist are present.

| Qualifying Individuals Signature | Date |
|----------------------------------|------|

| ì | iecklist#Q  | L323304       |              | Market State of the |           |            |         |
|---|---|---------------|--------------|---------------------|-----------|------------|---------|
|   |   | L323304       | R1           | WMC Van             | or Vacuum | Extraction | Treatme |
| , | da la companya da | sa Cou        |              |                     |           |            | 378.4   |
| × | ALC: N  | arskain, Pros | 1984 B. 1834 | 190                 | Unit D Te | Cunician : | 200     |

### INITIAL QUALIFICATION CHECKLIST

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#### П. **SAFETY**

- Demonstrate, by oral checkout, a satisfactory understanding of the following Safety items listed below. A satisfactory understanding is the ability to A.
  - Your responsibility concerning each safety item

|    | <ul><li>The purpose of each</li><li>How to apply the safety program/practic</li></ul>  | ee   |
|----|--|--|
| B. | Checkout shall be by a qualified VVET Tec Foreman/Supervisor.  | hnician or a designated  |
|    | Electrical Safety     Practices (MCP 2731)     Signature   | are Date   |
| C. | Attend the following training sessions. This Training Directorate or an outside vendor at Satisfactory completion of training is indicated records administrator's signature in the approximation. Lockout/Tagout for Authorized Employees (Limited) (000TRN663) or equivalent | nd must be scheduled as appropriate. ted by the instructor's or training |
|    | Signature  | Date   |
|    | Lockout/Tagout Practical     (000TRN726) or equivalent   |  |
|    | Signature  | Date   |
|    | 3. OU 7-08 HASP Training Requirements  |  |
| •  | Signature  | Date   |

Checklist # QL323304

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

| 4. | Conduct of | f O | perations | <b>Training</b> | Rec | quirements |
|----|------------|-----|-----------|-----------------|-----|------------|
|----|------------|-----|-----------|-----------------|-----|------------|

| a. Con Ops Chapter 1 Ops Organization   | n (00TRN491) or equivalent  |
|---|---|
| Signature   | Date  |
| b. Con Ops Chapter 2 Shift Routines (   | 00TRN492) or equivalent   |
| Signature   | Date  |
| c. Con Ops Chapter 3 Control Area Adequivalent  | ctivities (00TRN493) or   |
| Signature   | Date  |
| d. Con Ops Chapter 4 Ops Communica  | ation (00TRN494) or equivalent  |
| Signature   | Date  |
| e. Con Ops Chapter 5 Control On-Shif equivalent   | t Training (00TRN495) or  |
|   |   |
| Signature   | Date  |
| f. Con Ops Chapter 6 & 7 Event Investigation  |   |
| f. Con Ops Chapter 6 & 7 Event Inves  | stigations (00TRN496) or  |
| f. Con Ops Chapter 6 & 7 Event Inves<br>equivalent  | tigations (00TRN496) or   |
| f. Con Ops Chapter 6 & 7 Event Invese equivalent  Signature   | Date pment (00TRN497) or equivalent   |
| <ul> <li>f. Con Ops Chapter 6 &amp; 7 Event Investigation</li> <li>Signature</li> <li>g. Con Ops Chapter 8 Control of Equipment</li> </ul>                      | Date  Date  Date  Date  Date  |
| <ul> <li>f. Con Ops Chapter 6 &amp; 7 Event Invest equivalent</li> <li>Signature</li></ul>  | Date  Date  Date  pment (00TRN497) or equivalent  Date  erification (00TRN499) or           |
| f. Con Ops Chapter 6 & 7 Event Investigation  Signature  g. Con Ops Chapter 8 Control of Equiposition  Signature  h. Con Ops Chapter 10 Independent Vequivalent | Date  Date  Date  principle (00TRN497) or equivalent  Date  erification (00TRN499) or  Date |

Checklist # QL323304

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

| j.  | Con Ops Chapter 12 Operations Turnov             | ver (00TRN575) or equivalent |
|-----|--|------------------------------|
| Sig | mature   | Date                         |
| k.  | Con Ops Chapter 13 Operations Aspect             | s (00TRN576) or equivalent   |
| Sig | gnature  | Date                         |
| l.  | Con Ops Chapter 14 Required Reading              | (00TRN577) or equivalent     |
| Sig | gnature  | Date                         |
| m.  | Con Ops Chapter 15 Timely Orders (00             | OTRN578) or equivalent       |
| Sig | gnature  | Date                         |
| n.  | Con Ops Chapter 16 Operations Proceed equivalent | dures (00TRN579) or          |
| Sig | gnature  | Date                         |
| ο.  | Con Ops Chapter 17 Operator Aids (00             | TRN580) or equivalent        |
| Sig | gnature  | Date                         |
| p.  | Con Ops Chapter 18 Equipment Labeli              | ng (00TRN581) or equivalent  |
| Sic | onature  | Date                         |

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

### III. VVET Unit D Academic Training

- A. Work with authorized personnel. Classroom training (or video taping of classroom training) should be completed on the theory and functionality of the catalytic oxidizer system and a score of at least 80% must be obtained on the written exam. Through this classroom training, the individual should be able to demonstrate satisfactory knowledge to:
  - State the purpose of the system.
  - Identify the major components of the system.
  - Describe the function of each major component.
  - Describe how components affect overall system operations.
  - Describe the steps taken to ensure each component is functioning properly.
  - Identify any special precautions, limitations or technical specifications to be considered prior to starting up, operating, and shutdown on the system.
- B. Satisfactory completion of training is indicated by the instructor's or training records administrator's signature in the appropriate sign-off block.

| 1. VVET Unit D Academic Training |      |
|----------------------------------|------|
| Signature                        | Date |

#### IV. ADMINISTRATIVE KNOWLEDGE

- A. Demonstrate, by oral checkout, a satisfactory knowledge of TPR-1764 VVET Unit D Integrated Test procedure.
  - State the purpose of the procedure.
  - Describe the procedures applicability to job responsibilities.
  - Describe administrative controls (Precautions and Limitations, Prerequisites).
  - Identify document location and describe how documents are checked out and checked in.
  - Identify minimum supporting personnel, when they should be contacted, and how they should be contacted.

| Checklist # QL323304      | A Principal Control of the State of the Control of | Pa  |
|---------------------------|---|-----|
| The state of the state of | RWMC Vapor Vacuum Extraction Treatment  |     |
|                           | Unit D Technician   | λ., |
|                           | INITIAL QUALIFICATION CHECKLIST   |     |
| 大変性を大変 テーション 大学を発表を       | ·接受,这样的保险,因为什么,不是一个的人,不为什么做' <b>我</b> 不能 <b>成'就</b> ,这一个人,一个人是一个  |     |

|          | B.  |                                   | Checkout shall be by an a designated Foreman/Super   |  | ed VVET Technician or a  |
|----------|-----|-----------------------------------|--|--|--|
| *        |     | 1. TI                             | PR- 1764 VVET UNIT D   | INTEGRATED TE  | EST  |
|          |     | :                                 | Signature  |  | Pate   |
| <b>.</b> | PRA | CTICAL                            | FACTORS  |  |  |
|          | A.  | review                            | strate competency in each and/or walk-through at the ut the following items.   |  | ors listed below. An oral eviewing individual may  |
|          |     | 1. A                              | ctively participate in TPR   | -1764 VVET Unit I  | Integrated Test  |
|          |     |                                   | Sign   | nature   | Date   |
|          |     | 2. Pe                             | rform Start-Up and Shut-   | Down of VVET Un  | uit D  |
|          |     |                                   | Sign   | nature   | Date   |
|          |     |                                   |  |  |  |
|          | B.  | ability t                         |  | r simulate the follov<br>r qualified VVET T  | lividual to demonstrate the<br>wing practical factors unde<br>'echnician, or a qualified |
|          | B.  | ability t<br>the inst<br>job supe | o satisfactorily perform o ruction of an authorized o  | r simulate the follow<br>r qualified VVET T<br>le procedures.                      | ving practical factors unde<br>echnician, or a qualified                                 |
|          | В.  | ability t<br>the inst<br>job supe | o satisfactorily perform of an authorized of an authorized of an authorized of the applicability of the applicability of the at least 1 without endings. | r simulate the follow<br>r qualified VVET T<br>le procedures.                      | wing practical factors unde<br>echnician, or a qualified<br>Start-Up                     |
|          | В.  | ability the instr<br>job supe     | o satisfactorily perform of an authorized of an authorized of an authorized of the applicability of the applicability of the at least 1 without endings. | r simulate the follow<br>r qualified VVET T<br>le procedures.<br>error VVET Unit D | ving practical factors unde<br>echnician, or a qualified<br>Start-Up<br>or S Date        |

Checklist # QL323304

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

### VI. EMERGENCY/ABNORMAL KNOWLEDGE

- A. Demonstrate a satisfactory knowledge of the emergency/abnormal situations listed below during an oral checkout or walkthrough. A satisfactory knowledge should include the following, as appropriate.
  - Describe reasons for action(s) taken and the effect on the VVET operation. Include the consequences of failure to perform the procedure or mitigate the abnormal or emergency situation.
  - State the immediate actions.
  - Describe notification requirements for each situation.

| 1. | Simulate the response(s) to a loss of power to VVET Unit D         |      |  |
|----|--|------|--|
|    | Signature  | Date |  |
| 2. | . Simulate the response(s) to a VVET Unit D that will not start up |      |  |
|    | C:   | Data |  |

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### RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

### VII. JUSTIFICATION FOR DELETED OR N/A ITEMS

This section is provided to document the reason for each N/A. Each N/A will require a signature and date from the WAG 7 Field Operations Supervisor or OU 7-08 Project Manager. When completing this portion indicate the section or subsection that is N/A along with the reason for the N/A.

|     |           |      | _ |
|-----|-----------|------|---|
|     | Signature | Date |   |
| J   |           |      | _ |
|     | Signature | Date |   |
| · _ |           |      |   |
|     | Signature | Date |   |
|     |           |      |   |
|     | Signature | Date |   |
|     |           |      | - |
|     | Signature | Date |   |

Checklist # QL323304

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## RWMC Vapor Vacuum Extraction Treatment Unit D Technician INITIAL QUALIFICATION CHECKLIST

### VIII. EVALUATION

| Satisfactorily complete the VVET Unit D Initial Qualification written examination,      |
|---|
| with a score of 80% or better, upon completion of all items on this checklist and prior |
| to the qualification approval. The exam proctor's signature indicates satisfactory      |
| completion of the exam.   |

| with a score of 80% or to the qualification appropriate to the qualification appropriate to the score of the | Satisfactorily complete the VVET Unit D Initial Qualification written examination, with a score of 80% or better, upon completion of all items on this checklist and prior to the qualification approval. The exam proctor's signature indicates satisfactory completion of the exam. |  |  |  |  |
|---|---|--|--|--|--|
|   | Signature   | Date   |  |  |  |
| IX. QUALIFICATION APPR  | ROVAL   |  |  |  |  |
| I have reviewed this checklist and determined that each item has been either signed, indicating it has been completed, or deemed N/A with my approval. The completion and approval of this checklist qualifies the individual to work independently on the VVET UNIT D.   |   |  |  |  |  |
|   | Signature<br>WAG 7 Field Opera<br>Manager   | Date<br>ations Supervisor or OU 7-08 Project |  |  |  |
|   | Signature   | Date Prations Supervisor                     |  |  |  |
| X. CHECKLIST REVIEW   | ·   | •  |  |  |  |
| A review of the checklist has been completed and it has been determined that all required signatures are present and the checklist is acceptable for inclusion in the individual's training record.   |   |  |  |  |  |
|   | Signature Training Re   | Date presentative                            |  |  |  |